

**TECHNICAL REVIEW DOCUMENT**  
**for**  
**MODIFICATION TO OPERATING PERMIT 96OPRO132**

Public Service Company – Hayden Station  
Routt County  
Source ID 1070001

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**I. Purpose:**

This document establishes the decisions made regarding the requested modification to the Operating Permit for Public Service Company's Hayden Station. This document provides information describing the type of modification and the changes made to the permit as requested by the source and the changes made due to the Division's analysis.

This document is designed for reference during review of the proposed permit by EPA and for future reference by the Division to aid in any additional permit modifications at this facility. The conclusions made in this report are based on the information provided in the request for modification submitted to the Division on January 22, 2007, additional information submitted on January 23, 2007, e-mail correspondence and telephone conversations with the source. This narrative is intended only as an adjunct for the reviewer and has no legal standing.

Any revisions made to the underlying construction permits associated with this facility made in conjunction with the processing of this operating permit application have been reviewed in accordance with the requirements of Regulation No. 3, Part B, Construction Permits, and have been found to meet all applicable substantive and procedural requirements. This operating permit incorporates and shall be considered to be a combined construction/operating permit for any such revision, and the permittee shall be allowed to operate under the revised conditions upon issuance of this operating permit without applying for a revision to this permit or for an additional or revised construction permit.

**II. Description of Permit Modification Request/Modification Type**

The Operating Permit for the Hayden Station was issued on May 1, 2001. The expiration date for the permit was May 1, 2006. However, since a timely and complete renewal application was submitted, under Colorado Regulation No. 3, Part C, Section IV.C all of the terms and conditions of the existing permit shall not expire until the renewal operating permit is issued and any previously extended permit shield continues in full force and operation. The source requested that the permit be revised to increase the emission and ash processing limits for the ash silo. The current emission and ash processing limits are based on the assumption that the ash content of the coal used in the boilers is 11.5%. However, the coal delivered to the facility often exceeds 15% ash content. The proposed modification requested an increase in emissions and throughput

based on an ash content of 15 %. Requested PM and PM<sub>10</sub> emissions are 22.39 tons/yr, which is an increase of 5.2 tons/yr from previously permitted (potential) emissions.

Since requested emissions of PM<sub>10</sub> exceed the significance level of 15 tons/yr, the Division requested that the source submit actual emissions from the ash silo from the past two years to demonstrate that the requested increase in PM<sub>10</sub> emissions from the ash silo are below the significance level. In their January 23, 2007 submittal the source provided information indicating that actual emissions from the ash silo were 15.68 tons/yr in 2005 and 16.75 tons/yr in 2006, with an average of 16.215 tons/yr over that two year period. The increase in actual emissions from the project are shown in the table below:

	PM <sub>10</sub> Emissions (tons/yr)
Requested Emissions	22.39
Actual Emissions (average of 2005 and 2006)	16.215
Change in Actual Emissions	6.175

Colorado Regulation No. 3, Part C, Section X.A identifies those modifications that can be processed under the minor permit modification procedures. Specifically, minor permit modifications “are not otherwise required by the Division to be processed as a significant modification” (Colorado Regulation No. 3, Part C, Section X.A.6). The Division requires that “any change that causes a significant increase in emissions” be processed as a significant modification (Colorado Regulation No. 3, Part C, Section I.B.36.h.(i)). The increase in permitted (potential) emissions associated with this modification is 5.2 tons/yr, which is below the PSD significance levels of 25 tons/yr (PM) and 15 tons/yr (PM<sub>10</sub>). Therefore, the Division agrees that this modification qualifies as a minor modification.

### **III. Modeling**

The requested increase in permitted PM<sub>10</sub> emissions is below the modeling threshold of 15 tons/yr of PM<sub>10</sub> specified in the Division’s modeling guidance; therefore, no modeling is required.

### **IV. Discussion of Modifications Made**

#### **Source Requested Modifications**

The Division addressed the source-s requested modifications as follows:

#### **Section II, Conditions 4.1 and 4.3**

The Division increase the limits on emissions and quantity of ash processed through the ash silo as requested.

#### **Other Modifications**

In addition to the requested modifications made by the source, the Division used this opportunity to include changes to make the permit more consistent with recently issued permits, include comments made by EPA on other Operating Permits, as well as correct errors or omissions identified during inspections and/or discrepancies identified during review of this modification.

The Division has made the following revisions, based on recent internal permit processing decisions and EPA comments on other permits, to the Hayden Station Operating Permit with the source's requested modifications. These changes are as follows:

#### Page Following Cover Page

- The citation (above "issued to" and "plant site location") on the page following the cover page provides the incorrect title for the state act. The title will be changed from "Colorado Air Quality Control Act" to "Colorado Air Pollution Prevention and Control Act". In addition, the dates were removed from the citation.
- Added language specifying that the semi-annual reports and compliance certifications are due in the Division's office and that postmarks cannot be used for purposes of determining the timely receipt of such reports/certifications.
- Changed the Responsible Official.

#### General

- The Reg 3 citations were revised throughout the permit, as necessary, based on the recent revisions made to Reg 3.

#### Section I – General Activities and Summary

- Conditions 13 and 17 in Condition 1.4 were renumbered to 14 and 18 and Condition 21 in Condition 1.6 was renumbered to 22. The renumbering changes were necessary due to the addition of the Common Provisions requirements in the General Conditions of the permit.
- Added Section V, Conditions 3.g (last paragraph) and 3.d as state-only conditions to Condition 1.4. Note that Section V, Condition 3.d (affirmative defense provisions for excess emissions during malfunctions) is state-only until approved by EPA in the SIP.

#### Section II.1–Boilers – Coal Firing

- Revised Condition 1.7 to require that fuel sampling be conducted to determine the moisture content of the coal. Condition 15 already requires that the moisture content be determined but condition 1.7 did not specify moisture content.
- Removed the last sentence from Condition 1.14. This condition already refers the reader to Section III for Acid Rain provisions and this last sentence is not

necessary.

### Section II.3 – Particulate Matter Emissions – Fugitive Sources

- Revised Condition 3.1 to indicate that the Recordkeeping and Reporting requirements are listed under Condition 21.
- Removed the requirement to certify semi-annually that control measures are utilized to reduce fugitive particulate matter emissions from Conditions 3.2, 3.5 and 3.6. This language implies that a separate certification is required semi-annually. However, the Division had intended that the certification with the semi-annual monitoring reports be used to indicate whether adequate control measures are used to minimize fugitive particulate matter emissions.

### Section II.13 – Opacity Requirements and Periodic Monitoring

- Removed the “Note” included with the 20% opacity limit (Condition 13.1.1), since the Division considers that this note is no longer necessary.

### Section II.14 – Lead Periodic Monitoring

- Revised Condition 14.2 to indicate that lead emissions would be based on the annual TRI Report.

### Section II.15 – Fuel Sampling Requirements

- Since the permit no longer requires that the lead emission calculations use the lead content of the coal, the requirement to sample coal for the lead content in Condition 15 has been removed.

### Section III – Acid Rain Requirements

- Revised the Designated Representative.
- Removed the requirement to submit a copy of the compliance certification submitted with the quarterly data submittals, since these certifications are done electronically and there is no paper copy.
- Removed the requirement to submit the annual compliance certification in Section 4 (Reporting Requirements). As a result of revisions to the Acid Rain Program made with the Clean Air Interstate Rule (final published in the federal register on May 12, 2005), annual compliance certifications are no longer required, beginning in 2006.

### Section IV – Permit Shield

- Added the phrase “In addition, this shield does not protect the source from any violations that occur as a result of any modifications or reconstruction on which construction commenced prior to permit issuance” at the end of the first

paragraph in Section 1.

- The citation in the permit shield was corrected. The reference to Part C, Section XIII was changed to Part C, Section XIII.B and Reg 3, Part C, Section V.C.1.b and C.R.S. § 25-7-111(2)(I) were removed since they don't address the permit shield.

#### Section V – General Conditions

- Added an “and” between the Reg 3 and C.R.S. citations in General Condition 3 (compliance requirements).
- Added language from the Common Provisions (new condition 3). With this change the reference to “21.d” in Condition 20 (prompt deviation reporting) will be changed to “22.d”, since the general conditions are renumbered with the addition of the Common Provisions. This includes revised language to replace the upset provisions (affirmative defense provisions for excess emissions during malfunctions - upsets now referred to as malfunctions). This language takes effect on March 7, 2007 and is state-only until approved by EPA in the Colorado's State Implementation Plan (SIP).
- Removed the upset and breakdown provisions from Condition 4 (emergency provisions) since they are included in the Common Provisions, as the affirmative defense provisions for excess emissions during malfunctions.
- Replaced the reference to “upset” in Conditions 4 (emergency provisions) and 20 (prompt deviation reporting) with “malfunction”.
- The citation in General Condition 7 (fees) was changed to cite the Colorado Revised Statute. In addition, any specific identification of a fee (i.e. \$100 APEN fee) or citation of Reg 3 was removed and replaced with the language “...in accordance with the provisions of C.R.S. [appropriate citation].”
- The phrase “Part A” was added to the citation for Condition 13 (odor). Colorado Regulation No. 2 was revised and a Part B was added to address swine operations. Colorado Regulation No. 2, Part B should not be included as a general condition in the operating permit.
- The citation in General Condition 16 (open burning) was revised. The open burning requirements are no longer in Reg 1 but are in new Reg 9. In addition, changed the reference in the text from “Reg 1” to “Reg 9”.
- General Condition No. 20 (prompt deviation reporting) was revised to include the definition of prompt in 40 CFR Part 71.
- Replaced the phrase “enhanced monitoring” with “compliance assurance monitoring” in General Condition No. 21.d (recordkeeping and reporting).
- Added the requirements in Colorado Regulation No. 7, Section V.B (disposal of

volatile organic compounds) to General Condition 28.

#### Appendices

- Revised the description of the insignificant activity categories for the emergency generators and the diesel fire pump in Appendix A.
- Replaced Appendices B and C with the latest versions.
- Changed the mailing address for EPA in Appendix D. Removed the Acid Rain addresses in Appendix D, since annual certification is no longer required and submittal of quarterly reports/certifications is done electronically.